

VIRGINIA ROANOKE RIVER BASIN ADVISORY COMMITTEE MEETING MINUTES
Smith Mountain Lake 4-H Center
October 5, 2005

Attendance: VRRBAC members Senator Frank Ruff, Delegate Kathy Byron, Delegate Onzlee Ware, Read Charlton, Walter Coles, Robert Conner, Dr. Rupert Cutler, Haywood Hamlet, Evelyn Janney, John Lindsey, Curry Martin, Mike McEvoy, Charles Poindexter, and George Stovall. Ann Austin represented Congressman Virgil Goode. DEQ: Greg Anderson, DCR: Tim Ott

Call to Order:

Chairman Poindexter called the meeting to order.

Welcome:

- Roger F. Ellmore, Executive Director, W. E. Skelton 4-H Educational Conference Center welcomed the Committee to the center. He highlighted the facilities and programs of the center. They subsidize about 48 % of every child who comes to the center. The center is also doing their part for water quality by starting the process of replacing a sewage lagoon with a new 1.2 million dollar wastewater treatment plant. The plant will use the bio-wheel technology and the effluent will be distributed through drain fields. The W. E. Skelton 4-H Educational Conference Center at Smith Mountain Lake is an independent, 501(c) (3), non-profit charitable organization lead by a volunteer Board of Directors. The purpose is to provide dynamic, research based, hands-on, learning experiences to 4-H youth, other youth, and adults that will enable them to become self-directing, contributing, and productive members of society.
- Willie Jones, Bedford County PSA, welcomed everyone to the county. He noted the importance of the mission of VRRBAC to the basin and Virginia. He expressed appreciation for the hard work of the Committee.

Recognition of Members and Visitors:

Chairman Poindexter welcomed everyone and recognized members and guests. Guests were Tom Cain, Impact & Amplify, Chester Janney, Floyd Co., Willie Jones, Bedford Co. PSA, Russ Johnson, Franklin Co. BOS, Bonnie Johnson, Franklin Co., Harrel Johnson, Roanoke River Basin Association, Pete Lewis, SMLA and SML-VF&R, Shane Sawyer, RVAPDC, Roger Seale, Blue Ridge SWCD, Stan Smith, SMLA, and Tom Wilmoth, Bedford Bulletin.

July 26, 2005 Meeting Minutes:

These minutes were approved with the suggestion from Dr. Rupert Cutler that the method of tracking attendance be changed to reflect those present.

Greg Anderson, DEQ; "Overview and Status of Roanoke River Basin TMDL's"

Greg presented an overview of the Total Maximum Daily Load (TMDL) process and a listing of the status of TMDLs in the basin. Roger Seale then highlighted TMDL implementation on the Blackwater River.

- DEQ monitors the State waters to determine if there are water quality standard violations. The Integrated Report is sent to Congress on the quality of State waters including the "303d List" of impaired waters. Waters are considered impaired if standards are violated > 10 % of the time. If waters are impaired a TMDL study must be done. Then control measures such as permit limits and/or BMPs are implemented to correct the problem.

The TMDL is the amount of pollution a stream can receive and still meet water quality standards. During the TMDL study all sources of the pollutant and required reductions necessary are identified. A TMDL study is done for each pollutant. The TMDL must account for critical stream conditions

such as climate, flow, and other seasonal variations. Also, stakeholders and the general public are invited to participate.

- During TMDL Implementation control measures (BMPs, Permit Limits, etc.) are identified along with sources of funding. Focused stakeholder groups meet to discuss the issues and recommend solutions. For example for the Blackwater River Implementation Plan, there are 3 Stakeholder groups called Agriculture, Government, and Residential. It is important to conduct follow-up monitoring as the control measures are implemented.
- Below is a listing of TMDLs in the Roanoke River Basin in various developmental stages.

Roanoke River Basin TMDLs in Implementation or EPA Approved

Stream Name	City/County	Status	Impairment
Maggodee Creek, Blackwater River, Gills Creek	Franklin	Implementation	Bacteria, Benthics
Sheeps Creek, Elk Creek, Machine Creek, Little Otter River, Big Otter River	Bedford, Campbell	Implementation	Bacteria
Tinker Ck., Laymantown Ck., Carvins Ck., Glade Ck., Lick Run	Roanoke, Botetourt, and Vinton	EPA Approved	Bacteria
Birch Creek	Pittsylvania, Halifax	EPA Approved	Bacteria
Falling River	Campbell	EPA Approved	Bacteria
Flat Creek	Mecklenburg, South Hill	EPA Approved	Bacteria, Benthic
Ash Camp Ck.	Charlotte	EPA Approved	Benthic
Twittys Ck.	Charlotte	EPA Approved	Benthic

Roanoke River Basin Draft TMDLs

Stream Name	City/County	Status	Impairment
South and North Forks Roanoke River, Wilson Creek, Roanoke River, Ore Branch Masons Creek, Peters Creek	Montgomery, Salem, Roanoke Co. & City	Draft TMDL	Bacteria
Roanoke River	Roanoke City	Draft TMDL	Benthic
Roanoke River and Smith Mt. Lake	Bedford, Franklin	Draft TMDL	Bacteria

Roanoke River Basin TMDLs Studies In Progress

Stream Name	City/County	Status	Impairment
Pigg River, Storey Creek, Snow Creek, Big Chestnut Creek, Old Womans Creek, Leesville Lake	Pittsylvania, Bedford, Franklin	TMDL (2nd public Meeting 10/27/05)	Bacteria
Staunton (Roanoke) River, Cub Creek, Turnip Creek, Buffalo Creek	Pittsylvania, Halifax, Campbell, Charlotte	TMDL (2nd TAC Meeting 09/29/05)	Bacteria
Roanoke and Staunton (Roanoke) Rivers except Leesville Lake	Roanoke, Salem, Pittsylvania, Halifax, Campbell, Charlotte	TMDL (1st public meeting and begin monitoring 10/2005)	PCBs
Beaverdam Creek	Bedford	TMDL (monitoring began 7/03)	Bacteria
South and North Forks of Mayo River	Henry, Patrick	TMDL Monitoring began 7-05)	Bacteria
Smith River, Blackberry Ck., Leatherwood Ck., Marrowbone Ck.	Henry, Martinsville	TMDL Monitoring began 7-05)	Bacteria
Dan River, Sandy River, Double Creek, Sandy Creek, Fall Creek, Byrds Branch	Pittsylvania, Halifax	TMDL (monitoring begins 07/05)	Bacteria
Banister River, Cherrystone Creek, Whitehorn Creek, Sandy Creek, Stinking River	Pittsylvania, Halifax	TMDL (Monitoring began 07/05)	Bacteria
Great Creek	Mecklenburg	TMDL (monitoring completed 09/05)	Bacteria

- Greg indicated that the PCB Study this summer concentrated on trying to identify locations of possible contributors to the problem. DEQ is now ready to place "Virtual Fish" at various locations in an attempt to narrow down areas to focus on source identification. These devices act like dialysis tubing and will concentrate low levels of the PCBs. They are placed in the stream for 30-45 days, concentrating any PCBs present in the water column. Then the lab will then be able to measure and quantify if present.
- DEQ is evaluating the need for additional funding and will share that information once it is finalized (probably in December). Increased funding may be needed for biological monitoring and implementation of TMDL Plans (point source and non-point source measures).

- The State has adequate legislative authority for point sources, since implementation of TMDL point source allocations is already mandated. The State has no legislative authority to regulate most non-point sources or to require TMDL implementation. Localities do have the authority to adopt ordinances to protect water quality (including implementation of TMDL components) (15.2-1110, 15.2-1200 and 15.2-2283).
- There will be a joint meeting on November 21, 2005, of the State Water Control Board, Soil & Water Conservation Board, and the Chesapeake Bay Local Assistance Board to discuss options for achieving non-point source pollution reduction goals.
- Greg then gave a brief description of the Blackwater River Basin as an introduction to Roger's presentation on implementation. The watershed is dominated by agriculture. Bacteria TMDL was approved in 2001 and a Benthic TMDL approved in 2004. DEQ bacteria data has improved since implementation started. Graphs demonstrating downward trends for bacteria were displayed
- **Question: Senator Ruff asked why impaired waters seemed to be discontinuous on the map with impaired waters shown in red.** Greg indicated the most likely reason was lack of data. Data from a sampling point is generally applied only to a certain distance (10 miles) and not to the entire stream. Other reasons include the presence of a discharger in certain areas or a greater source of non-point pollutants, dilution, and natural attenuation of the pollutant.
- **Question: Dr. Cutler asked him to explain if the problem with the benthics was the absence of critters.** Greg said it was generally a situation where the population was not a good population of organisms. It could be the absence of insects or dominance by more tolerant organisms. Some organisms can survive living in lesser quality water and are considered to be tolerant. Others prefer good quality water and can not survive in poorer conditions. A good population will have a balance of different types of organisms. Many of our benthic impairments are likely due to a loss of habitat because to sediment filling up the interstitial spaces they might live in. Examples of other stressors may be high nutrient or toxics levels.
- **Question: Dr. Cutler asked how any new funds would be spent.** The money would go for the implementation of BMPs and to upgrade treatment to meet more stringent limits. **Could the money be given to land trusts for the purchase of conservation easements?** I am not sure but that is a good idea. I suspect people in charge of the available money are open to possible solutions and I will pass that on.
- **Question: A question was asked where the November 21, 2005, meeting would be held.** It is in Richmond, but I will need to find out the location and pass that along. (Since the meeting an email was sent with the location and time of the meeting. It is at the Library of Virginia at 12 Noon.)
- **Question: Evelyn Janney asked what is being done about the wildlife in these impaired streams.** Currently there is not a focus on the wildlife but rather the human caused or anthropogenic pollutants. **As farmers we raise about as many deer as we do cattle.** I understand. You raise a good point. **Dr. Cutler said that a relationship could be considered with the DGIF to extend the deer hunting season to adjust the population to improve water quality.** Evelyn asked how you make the sportsman understand that there is more to this than just a big rack. **Dr. Cutler believes that DGIF should be part of the solution.**
- **Question: Robert Conner asked about the slide regarding localities having the authority to adopt ordinances to protect water quality and whether 15.2-1110 referred to the State Code.** It does. Other sections of the code that provide authority are 15.2-1200 and 15.2-2283. **Chairman Poindexter asked do you know any localities that are doing this.** No, I do not.

Roger Seale, Blue Ridge Soil and Water Conservation District; “Blackwater River TMDL Implementation Program”

The data Greg showed was from the Upper Blackwater area which ends at the Rt. 122 Blackwater Bridge and extends back to the headwaters. This was one of the 3 pilot implementation programs in VA. The Conservation District signed a contract with DCR to run the program which was primarily for agriculture concerns. However, the bacteria source tracking (BST) data did show a human as well as an agricultural signature. This was due to septic system and straight pipe problems. Money was provided for BMPs which work not only to mitigate the bacterial pollution but it also helps with other pollutants such as helping to hold the soils in place, therefore lowering the amount of sediment reaching streams. All BMPs are required to be maintained for the 10 years of the BMP lifespan.

- The Clean Water Act of 1972 required compliance for non-point source pollution. The listed impairment is for fecal coliform bacteria and benthics (sediment stressor) for some segments. Studies indicated that to meet water quality standards for bacteria, direct deposition of manure by all livestock and all human waste shall be eliminated from stream. Wildlife also contribute to the problem.
- The project goals include:
 - 119 Full Livestock Exclusion Systems
 - 70 miles of riparian pasture fencing
 - 85 hardened stream crossings
 - 7* septic tank systems to replace straight pipes
 - 8* alternative waste treatment systems to replace straight pipes

* (This straight pipe number turned out to be a very conservative figure. Many rather than going directly to the creek discharge in the woods and wash to the creek during rain)
- Agricultural Best Management Practices Offered are:
 - Animal Waste Facilities
 - Stream Protection – 35 feet buffer (This is a tough sell to the farmers because where there are narrow creek bottoms it takes away a large portion of their useable land)
 - Grazing systems with alternative water sources, stream crossing & travel lanes
 - Loafing Lot Management Systems
 - Sediment control – stream bank stabilization, critical area treatment, and reforestation of potential eroding crop and pasture land
 - Cost-share assistance – 75% of eligible costs. These are 319 funds.
- Photographs of muddy manure laden areas were shown. These areas are neither good for the environment or the cattle. During storms it will flush to the drainage areas. Mastitis control greatly improves in dairy cows when the areas and water are cleaner and the farmer sees significant increase in milk production.
- Photographs of BMPs were displayed including concreted heavy use areas including curb and guttering to direct the manure to a pit, travel lanes, rotational grazing systems, frost free watering systems, critical area stabilization, a forested riparian buffer, and stream bank stabilization.
- Pressurized watering systems are encouraged over spring fed systems which can go dry easier. When used farmers should consider a backup system where the cows can get to the water in case of a power failure. The cows actually prefer the water from the waters because it is cleaner and tastes better. The cows will actually cross the stream to get to the watering devices. George Stovall says that is exactly right because his cows definitely prefer it over the creek water.

- Boy scouts need environmental work for merit badges so they will provide help planting trees etc. A mixture of hardwoods was used in the forested buffer displayed. The seedling is planted and surrounded by a PVC pipe as a shelter to protect from wildlife until the roots are established. The shelters are generally not used on pine seedlings when used because the deer do not eat them often.
- A stream bank restoration was displayed and in this case by the time the proper permits and agency signatures were obtained the stream claimed another 15 feet of bank. An eroding bank really moves a lot of sediment down stream. When stone is used it gets to be rather expensive. It is sloped back and the bank vegetated.
- TMDL contracts have been signed to install:
 - 8 Animal Waste BMP's - \$351,010
 - 10 Grazing Land Protection - \$207,002
 - 2 Stream bank Stabilization - \$49,719
 - 1 Stream Protection - \$16,777
 - 1 FR-3- \$400

Total: \$624,908
- Residential (Septic) BMPs offered are:
 - Septic connection to public sewer system
 - Septic system repair
 - Septic system installation/replacement
 - Alternative on-site treatment systems
 - Cost-share assistance – 50% to 75% eligible costs based on household income, capped at \$3,000.00 for conventional systems and \$7,500.00 for alternative treatment systems.
- A picture was shown of an old home built in the early 1900s putting in a septic system. A lot of pump systems are put in because the houses often sit down next to the stream and the water table is high that there is no where to install a drain field. So a tank is put in and the waster pumped to a drain field in a suitable area.
- TMDL have been signed to install:
 - 16 contracts to replace straight pipes
 - 10 contracts to repair failing systems
 - 1 contract to connect to public sewer
 - 1 alternative treatment system
 - \$30,696 – Cost Share paid to date
- Initial Agreement with DCR to facilitate action toward goals included:
 - \$500,000 total funds originally made available to finance a voluntary cost-sharing program
 - \$300,000 of the total was allocated for agricultural BMP's
 - \$52,500 of the total was allocated for residential (septic) BMP's
 - \$147,500 of the total was for technical assistance, administrative, equipment, etc.
 - \$200,000 additional has been approved for cost sharing
 - \$120,000 additional has been approved for technical assistance
- When starting out to conduct implementation it is important to involve local governmental entities, farm and/or agricultural organizations, and community and church leaders. It also is beneficial to enlist the help of fellow agencies. There was a lot of fear when this program started but it is hoped

enough progress can be made to convince others to participate and the program can be kept as a voluntary one.

- When getting the word out it helps to use a variety of methods. Mass media such as radio, TV, and newspapers are important. Direct mailings like newsletters, pamphlets, etc are helpful along with public meetings within community. Pasture walks, grazing system workshops and other educational activities have been effective. Another good rule is to feed them and they will come. Stream walks and/or investigations help identify problem areas.
- When putting BMP's on the ground it is imperative to provide timely and effective technical assistance for BMP planning, to obtain Board approval of BMP's promptly, and to arrange for prompt check-out and payment when BMP is completed
- **REMEMBER** TMDL Implementation Programs are an opportunity not a punishment!
- **Question: Dr. Cutler asked about the establishment of the stream buffers.** To establish the buffers the VDOF provides technical assistance and the tree seedlings. Cost share is provided available to the landowner for the fencing and the tree planting.
- **Question: Robert Conner asked about the old septic system replacement. Have these been in place for years or newer systems.** Usually old homes built prior to the 1950s. Homes built after that had septic systems. We have found one that did not.
- **Question: Robert Conner asked if you could use the ground up tires rather than concrete or cement.** Roger said it could certainly put it over the gravel as it would not hurt the hooves. When using stone on walkways or other areas you must use stones that will not cut the hooves.
- **Question: Read Charlton asked what an alternative system is.** It is a single family home package plant where the effluent then goes to a drip disposal system. Everything is sized on the number of bedrooms.
- **Question: Robert Conner indicated that at Lake Gaston there were no public utilities and the area continues to be developed and everything is on septic systems. His gut feeling is these systems will begin to fail as people are living here year round. He asked does SML have a similar situation.** Chairman Poindexter said yes we are on septic systems but we are transitioning to the use of package plants especially for subdivisions. Franklin Co. has already approved three where one plant will treat all the sewage from the houses in the development and the almost clean effluent is put into a drain field. That requires that a lot of open space be required to be left in a development. We only have two rivers so if we ever have to build a conventional plant it will have to be discharged to one of them. Until the technology is at a 100 % we are not going to do that. By using these package plants in the developments and clustering them around the lake we will eventually be able to hook them up together into a single system. **Read Charlton asked if the package plants were portable.** They can be but these are not and they are about the size of the room here. **Robert Conner asked how much land had to be left to accommodate these plants. In some cases 35-55 acres and we would need up to an estimated 300- 500 acres in the West Lake-Hales Ford area to hook them all together. But right now the developers are being required to leave large areas, about ¾ acre, for these package plants.**
- Roger mentioned the Federal law suit won by the American Canoe Association and the National Littoral Society against EPA that was driving the TMDL process forward.
- **Question: Robert Conner asked about biosolids and if they were a problem in the runoff.** Roger said they are pretty controlled and there was a setback requirement so many feet from a

stream for application. We have not really had a problem but there is a musty smell but it is not nearly as fragrant as the animal waste from a manure pit. These are considered from a loading standpoint during the TMDL study. **Robert said but the difference is we have all been around manure in farming and it does not bother us but when dealing with human waste there are some concerns.** Roger replied it does not bother anyone until the farm next door is subdivided and people move in that don't have the same appreciation for that odor.

Russ Johnson, Franklin County BOS; "SML Project FERC Re-license Status"

- The Tri-County AEP Re-licensing Committee was formed of Bedford, Franklin, and Pittsylvania County representatives to work regionally to address the issues associated with the Shoreline Management Plan discussions and long term the entire re-licensing effort. Recently Cambell County has joined in but the name to date has not been changed.
- Two supervisors from each County are on the Committee and there is legal counsel provided. The Committee operates in a very public manner. We take minutes, work with various citizen groups, and are trying to approach the entire re-licensing effort.
- Currently about 17 studies are planned to be conducted in the next 18 mos. including the studies of the topics Sedimentation and Erosion. Others listed in a letter to FERC are In-Stream Flow needs, Drought Management, Angler Use Survey, Socioeconomic. Native and Exotic Aquatic Vegetation, Water Withdrawals, Water Quality, Archaeological and Historic Resources, Navigational Aides, Recreation Assessment, Debris, Fish Entrainment and Impingement, Roanoke Log Perch, Littoral Zone Habitat and Fish Spawning and Rearing Assessment, and one on a Ban on In-Water Construction.
- Russ indicated that the most important message to give the Committee is that the Counties are working together cooperatively, sharing resources on trying to build a fixture to work permanently with AEP the projects operator as we move forward.

Bonnie Johnson, Asst. County Administrator; "Franklin County Sewer and Water Overview"

Public Water Projects:

The Phase I Public Water Project:

- This project covers about 7 ½ miles of waterline service to the Route 122 area between Hales-Ford Bridge and Westlake Village. It picks up the Windtree development (Rtes 666 and 948) down one spur and a commercial development on Scruggs Road that is part of Westlake.
- Construction upgrades to public water infrastructure on the Bedford County side of SML was required in order to provide service to Franklin County. Franklin County owns 46% of the water line on Route 655 and 23% of the line on Route 122 in Bedford. The source water, drawn from Smith Mountain Lake, is purchased from Bedford County PSA. Franklin Co. worked with them to upgrade the infrastructure and height of their tank so they could service Franklin Co. We are also cooperating with them now to conduct a study that would enable the High Point plant to expand from 1 to 2 MGD. The studies take a long time and many agencies, FERC, and AEP are involved. The time to start on these studies is now.
- This \$3.4 million project was funded by grant and loan funds establish the County's need for public water from Smith Mountain Lake. A special thanks to Congressman Goode who secured over \$1,000,000 in grants for the project. Without him I am not sure we could have public water infrastructure in Franklin Co.

The Forest Hills Water Project:

- This is a separate \$584,170 public water extension south of Rocky Mount, largely funded by grants (75%), and involves about 2.5 miles of water line. The source water is purchased from Rocky Mt. It will also pick up the Rocky Mt. Sewage Treatment Plant as it passes by.
- It meets the same standards as the Phase 1 project. It is designed for the long-term and for linkage to an eventual County-wide system.
- Congressman Goode also helped obtain this money, from the USDA. About 35 % of the funding is grant money. Work started yesterday.

Water Treatment Plant Studies:

- At the same time we are conducting our own study for source water on our side of the lake. We are looking in the Blackwater River area ensuring water quality is not a concern. Every indication is that water quality is good so we need to find appropriate property and initiate the permit process.
- Anticipated construction cost of \$4.5-5M for a 2.5 million gallon per day plant, exclusive of land purchase. It would be expected to provide up to a minimum of 2.5 million gallons/day, although it may start as a smaller plant and grow beyond 2.5 million gallons/day. It would serve countywide and our partners in conjunction with other sources and would be permitted and developed as public water demand increases.

Other Water Studies:

- Other areas of water need include the Route 220-North Corridor between Rocky Mt. and Boones Mill. Also we are conducting long-range countywide service planning.

Operations and Policy Development:

- The BOS has been working on policy and standards development. The Public Works Department created in August 2003 to be the focal point of all our public works.
- The Department works with potential customers on hookups and water extensions by developers and the County. Public Works is in charge of utility operations, planning, and development plan review for utilities.
- Rates, Fees, Policies, and Construction Standards were developed and adopted by the Board of Supervisors. Public water extensions beyond the Phase I public water project are anticipated to be addressed by the Board of Supervisors over the coming year. In addition, integration of developer extensions to new service areas may be considered by the Board of Supervisors.

Sewer Development:

Sewer Needs Study for the general Westlake-Hales Ford area (July 2005):

- Franklin County is very proud of their Bedford Partners who are moving forward with sewer development. We have done some studies to determine what can be done in terms of sewer service to this area that will sustain the type of development envisioned by the BOS. A draft study should be completed soon. There are some things in the draft that the BOS have acted upon.

- Soils in the study area appear to accommodate non-discharge systems very well. This would permit a couple of plants operating at 95 % efficiency prior to disposing to a mass drain field(s). Drain fields would be monitored carefully. This would help eliminate a direct discharge that would have to go to either the lake or Gills Creek.
- Development in area over the short-term indicates the need for 440,000 gallons/day of design flow for sewage treatment with actual usage likely to be 45% of that figure. Long-term sewage need may reach 2.6 M gallons/day of design flow.
- The BOS has prioritized the update of the land use plan for that area so that any utilities can be designed in accordance with that plan. In addition the BOS has directed sewer standards to be developed and added to Chapter 22. The County wants the standards for sewer design and operation to assure excellence, sustainability, and potential for centralized approach should the County see the need over time. These Non-discharge systems may be supplemented or replaced by central sewer discharge system, if future sewer need indicates.
- Feasibility and permitting of a discharging plant would need more consideration by the County and the Virginia -DEQ. Development proceeding at this time by permitting of non-discharging sewage treatment plants developed by the private sector. The BOS is reviewing and providing guidance on planning, policy and any public project development.
- **Question: Robert Conner said it seems if all this is set up with all entities involved, so it is in the political arena.** The Public Works Dept. reports to the County Administrator who reports to the BOS who are elected. So the BOS is very much involved in the public works projects. **So you do not have an Authority?** We have a Public Works Dept. and we have some agreements in place.
- **Question: Dr. Cutler asked if there was a comprehensive plan that prioritized development.** The comprehensive plan has just been updated to include public utilities. **Dr. Cutler asked is there a fee you assess the developer for infrastructure?** There are policies in place. If the developer wants to hook on to the system the BOS must approve and the developer pays for the line to the system. If we ask him to do something that is more than needed for his development then that cost can be applied to the connection fee.
- **Question: Senator Ruff asked if we were getting resistance from developers and the public about using the package plants.** Chairman Poindexter replied actually there was not a better way to go. Once the VDH started approving them and the technology seemed to be working well it seemed the way to go for this part of the county. We looked at a couple already operating in Bedford County. It is leading to proposals for more multifamily developments and smaller lots. This seems to fit the modern planning and development theory of clustering the houses and having more open land. Also the developer is paying for it and not the taxpayer.
- **Question: Robert Conner questioned the cost of the package plants.** There was one that was about \$1,000,000 that would serve 500 homes.
- **Comment: Stan Smith said he applauded what was being done by the Counties with the package plants. However he believes the community needs to face up to the problems with existing septic systems. There are many things that can be done to help the residents come to grip with the maintenance of these systems. Chairman Poindexter said that TLAC was considering a maintenance ordinance for septic systems requiring mandatory inspection and pump outs. Once TLAC approves the ordinance it would be sent back to the participating counties to adopt or reject this for the lake area, probably within at least 500 feet of the lake.**

Willie Jones, Bedford County Staff; “Bedford County Sewer and Water Overview”

- About 85 % of Bedford Co. flows into the Roanoke Basin. They are also in the James basin and are influenced by issues in that basin. In that part of the County we are linked up with the City of Lynchburg.
- At SML we constructed a water treatment plant at our High Point subdivision. That plant has been expanded to a million gallons capacity and is currently treating about 100-200 K gallons per day. This could be ramped up quickly. We are using a fairly new technology, membrane filtration, which does not require a lot of chemicals to treat. We run the water through the filters and disinfect it and it is ready to go. This helps hold down the residuals issues that you have with other treatments. We also are set up with a double filter system, where a second filter treats the water used to backwash the primary filter. This eliminates a double pumping of the water for those purposes, gives us about 98 % efficiency, and holds down pumping costs. We began furnishing Franklin Co with water in mid August and are starting to learn the tricks with operating this distribution system. We are still in the learning stages of making sure we are delivering the water in an efficient manner and at a good quality. We are also expanding our ability to furnish water to various subdivisions on the lake. SML is a lake with many points and it is not an easy to get the water everywhere. So we are gradually extending our lines down these peninsulas as we have gone through failing well systems in some of these subdivisions.
- We hope to also address the sewer and septage issues which are crucial to the community. We have begun working on a sewer system for the SML region. We just completed and signed a contract, and broke ground on a 10.2 million dollar sewer treatment and collection system with provide sewer service down the Rt. 122 corridor in Bedford County. This is the first public/private partnerships process in the State to construct a utility. We liked the process so well that a second one has been signed for another treatment plant in the upper Goose Creek area. Hopefully these will address the growth we are experiencing. The plant at SML will use a bio-wheel technology and can be easily expanded. It is very effective at treating the waste and is also very energy efficient. To learn more about the process used go to the link <http://www.bcpsa.com/PPEA/PPEAguidelines.htm>. This process condenses the time from start to finish of a project. We are doing a 4 year project in about 2 years. It also helps save money as in this case the cost was about 90 % of the bid from a conventional bidding process. It takes a lot of work but it is a viable mechanism for public/private partnerships to achieve the savings and efficiencies expected of governments these days. We also have a septage treatment capability at the new plant. We are not sure what the actual need is yet, but there are no requirements that homeowners treat the septage. However for the long term future of the lake this is an essential service needed to protect water quality. Hopefully this capability will make it more cost effective for the citizens to have their septage treated. It is important that we keep the water clean as it is also our drinking water source.
- The State has adopted new water supply planning regulations. These regulations encourage localities to work together by giving them incentives to do so. Bedford has worked with other governments on a number of projects. There is a lot of activity and a lot of understanding of what the long term needs are. New ways are being created for us to work together and achieve the goals that we have.
- **Question: Robert Conner asked what would need to be required for the maintenance of the septic systems. In his view the only thing that can be done is to pump it out.** That is exactly right. But we must provide ways to treat the pumped out septage. Currently it is hauled to Lynchburg and Roanoke for treatment. By providing the service at the new plant, it will hopefully make it more cost effective for the citizens to treat the septage. I can show you many of fields where it used to be dumped, but that is no longer acceptable. **Stan Smith said that another thing that could be accomplished is to educate the residents. Many of the people have never used a septic system before and need to be trained.**

Pete Lewis, SML Water Safety Council “Blue Ribbon Panel Initiative on Water Safety”

- There are ongoing initiatives to educate people on boating safety on the lake. The Power Squadron and Coast Guard Auxiliary in conjunction with DGIF have conducted safe boating courses throughout the Lake area and 405 people have taken the Boat VA course this year. The Virginia Department of Game and Inland Fisheries (VDGIF) in cooperation with the SML Boating Assoc. updated a 16 min.video for boaters that is available at visito centers and rental locations. (VDGIF) in cooperation with the Smith Mountain Lake Water Safety Advisory Council kicked off a new program to facilitate reporting of violations. The program, called "Lake Watch," will assist people who witness violations in providing better information to game wardens responsible for patrolling Smith Mountain Lake.
- Despite all this about 1/3 of all VA boating accidents occur at SML. We are one of the State's most utilized bodies of water, but unfortunately generally recognized as the most dangerous bodies of water. DGIF says the accidents at SML Lake are different than at other lakes. Ours tend to be boater on boater rather than self sustained. For example in 2005 there were 12 fatal boating accidents in VA and 3 were on SML. One was the horrendous large power boat collision with a slower moving and smaller boat at night in which 2 people were killed.
- DGIF asked the SML Water Safety Council to set up a public forum on water safety at the lake. 450 - 500 people attended. Pete took 4 pages of notes on the ideas, suggestions, and other comments of the public. It was close to unanimous that more law enforcement, speed limits, and noise ordinances were needed and that high performance boats should be banned from the lake. The task force has held one meeting and set up issues to study. The next meeting is 10-10-2005 at which the completed research will be considered. Citizen ideas and discussion are highlighted below.
 - Increase game wardens in the Smith Mountain Lake area. This means more money.
 - Ask the three counties to increase manpower to patrol and assist the DGIF on the Lake. Several wanted volunteers to be under control of the Sheriff. Some wanted the Marine FD to issue citations.
 - Request DGIF to use more highly visible marked patrol boats. Move a regional office of DGIF to SML. Use the Coast Guard as a patrol agency.
 - Speed limits on the lake for day and night operation.
 - Mandatory boating education. There should be licensing of boat operators. This would have to be a State-wide initiative but it could help with funding. Some wanted boats to require a decal. Boats could be inspected prior to use on the lake. There should be uniform check out procedures for boat renters.
 - Boat noise is boat noise. Some boats are just louder than others.
 - Require a spotter for skiers etc. All persons being towed wear personal floatation devices and have an observer in addition to the operator. Boat citations should be tied to motor vehicle driver's license. If you get a DUI in a boat it applies to your DMV license. Ask area newspapers to publish boating citations. Have fees for horsepower's, day use fees when boat is brought in on trailers, or other boat use taxes.
 - Residents say high performance boats captains show no respect, are too wild, and are not welcome at SML. Other States do prohibit these boats in some instances, such as MD and PA. Some want to just ban high horse power. It is tough to define what you want to limit. If you limit horsepower then large boats that do not travel fast are banned. Where do you stop? An argument could be made that personal water crafts should be banned because they are involved in the greatest number of accidents.

- We are looking at marina operation and rental boat renter policies. Also boat density. Federal guidelines are 13 water-acres per boat. Areas less than that are considered progressively more crowded. Smith Mt. Lake is a deep lake so that might not be a good method to use here. The lake continues to develop and there is going to be more boats. We are examining other lake practices. The idea of ABC regulations to require a designated skipper is being thought about.
- Some of these ideas are happier than others. Our task is to consider the citizen input which deserves a serious look. We hope to make recommendations to the SMLA by 12-01-05. SMLA will review and implement those that they agree with and are hopeful other associations will join in.
- **Question: Dr. Cutler asked about the impact of boating on water quality at SML.** Stan Smith says there is none discernable but it is known that problems, especially from 2 cycle engines, can result. **Willie Jones, Bedford County, concurred, based on testing results.**
- **Question: Read Charlton asked are the boat motor manufacturers required to go to 4 cycle engines by 2007.** Stan said the ones sold today are 4 cycle and are quieter, less damaging, and more efficient.
- **Comment: Robert Conner commended the panel on their efforts. We have a similar program and concerns at Lake Gaston and we keep coming back to everything comes down to enforcement. He believes even if we have 3 full time officers it would not be enough as they can not be everywhere at once. We do not have the funds and neither does the State. A special use tax could possibly help.** Pete inferred that deterrence would result if there was a risk of consequences. For instance no one here will drive through Boones Mill at 50 mph because there is a good chance they will be ticketed.
- **Question: Ann Austin asked him to explain about SML being navigable and that is why we can not ban these boats.** The U. S. Coast Guard has designated this as navigable and there is a Federal Judge who agrees. The Coast Guard however says you can ban any boat you want. However they would be much more interested if it involved the Chesapeake Bay rather than SML. He is not sure it would be a good idea.
- **Question: Chairman Poindexter asked who has that authority to ban the boats.** If it is supported by the Coast Guard then it would become a State legislative matter. Perhaps the Counties could too. **Chairman Poindexter said it is obviously political but he did not believe Franklin County had the authority.** Read Charlton said the sight seeing boats on Lake George in the recent accident were not licensed by the Coast Guard. **Then they are in serious trouble as those boats and the SML Virginia Dare are required to have a Coast Guard licensed Captain.** Robert Conner asked if the Coast Guard participated in patrols on the Lake. **Pete replied that before his time they did but apparently alienated a number of people and were asked to leave, which they did. Now they would return if asked, but due to their other responsibilities such as port security since 9/11 the return is not likely. The Coast Guard Auxiliary does patrol the lake on weekend afternoons and are visible but have no police authority. The Marine-VFD also patrols but has no authority. The key is law enforcement and the key to that is funding.** Robert Conner responded that's right but requiring a boat operator license is also important. Instead of someone throwing the key to their young grandson there should be a requirement in place to control who and what experience is necessary to operate a boat. If you want to operate a jet ski you need so many hours of training you need so many hours of education and a license. If you want to operate a power boat the same applies. **I agree but again this is a legislative process that must be agreed to by the whole State of VA. It is not something that can just be legislated for SML.**
- **Question: Dr. Cutler asked if the State Police were involved with water enforcement on the lake.** Pete said the police from Bedford and Franklin Co. have been with the Sheriff Department. **Chairman Poindexter said they ride with the Game Wardens if they need to. Not so much for**

boating enforcement but they have their ways of accessing the lake when necessary for narcotics, etc.

Legislative Comments:

Chairman Poindexter asked for input from the legislative members present at the meeting concerning work of the Committee for the next year.

- Senator Ruff said there are some things that can be done to support the issue just discussed. The DGIF is a non-general funds organization. They operate off the fees from hunting and fishing licenses, etc. He was somewhat concerned during the last GA session about the proposal to man SML under mandatory terms. We must be very careful when we take our limited resources and put it in one community over another. There are some things that may come out of the proposal that really make a lot of sense. I do not know the circumstances of this terrible accident but we should not legislate out of emotion. Also how do you get local government to step up to the plate, whether they rely on the Auxiliary **Robert Conner stated that 25 % of the real estate tax in Brunswick Co. comes from the lake. These people do not have a lot of school children and don't ask for a lot. About the only service they get is for the County to provide them a place to take their garbage. We all preach enforcement but I think it is going to come time for the lake localities to step up to the plate and take some responsibility in adding law enforcement officers to do this.** Senator Ruff indicated that some towns generated a lot of funds by issuing speeding tickets. Localities have the right to pass an ordinance to control the speeds etc with boats and collect the fines to be used to enforce the measures. Chairman Poindexter said there are other localities which have additional enforcement needs during certain seasons. The Comp Board formula is one officer per 1500 citizens. Is there a mechanism within the Comp Board process to recognize special needs such as these? **Whenever we have tried to talk about that everyone has special needs. Some inner cities have special problems and I see there is an argument for this case where there are law enforcement problems at the State Lines. The population explosion around the lakes is similar to the beach area. Every time we have tried we have run into some roadblocks.**
- Delegate Byron said she was concerned about the frustration coming out in the minutes and the "Strawman" to be discussed today about the future of VRRBAC. She was interested in hearing how the members were feeling about this and what they wanted to do. She appreciated the dedication, sacrifices, and hard work of the committee to date. **Robert Conner said this is the greatest group of people to work with and that VRRBAC had achieved success at creating unity throughout the basin among farmers, business people, and you name it. The group has put in a lot of work and asked for very little. His concern is that the past 3 years of work for no avail because North Carolina does not seem to be moving. We have the problem in the lower part of the basin where we share borders with Carolina and most of the water is in Carolina at Gaston. Kerr also shares water with NC. NC has not even met to our knowledge. Are we going to be left hanging out here and will NC's attitude be "So what, we don't care what that committee says and we are going to do what we want in NC". Who within our State needs to communicate with NC to determine if they plan to meet or what?** Evelyn Janney said she to did not want to work to no avail but she thinks what we are doing is valuable. I am from the upper end and I have learned a lot about the basin and I believe this commitment is important to all of us. **Read Charlton wanted to know if we should go ahead and invite NC to a meeting.** Robert Conner indicated that we needed to contact those instrumental in NC of joining in with VA to create the Bi-State Commission. **Senator Ruff said the Bi-State concept probably originated from the Roanoke River Basin Association (RRBA). There was a meeting in Danville where the legislators of the two States agreed to move the legislation forward. The problem NC has and we have too is that the population centers in other parts of the States do not view this with the same level of importance. He asked if their members were appointed.** Robert Conner said yes but they have not met. **Harrel Johnson (RRBA) said that was true. Lucy Allen, NC Representative has taken the lead on this and a bill for funding was presented last year.**

Harrel has yet to hear whether this bill was passed as the Governor has not acted on all of the legislation. The Committee has been partially formed but they will probably not meet until the funding is secured and NCDENR agrees to provide support staffing similar to that provided by DEQ in VA. Robert Conner said there is so much happening with the Raleigh area expanding that maybe NC does not want us involved. They may need water from Lake Gaston due to the triangle area expanding. We have heard of other water withdrawal proposals at our Danville meeting a couple years back. Maybe they have things going on that they do not want us to know about. So maybe they do not want to meet. Nevertheless we need to find out if they intend on meeting or not and then we will do what we need to accomplish and present our recommendations to the VA legislature. **Chairman Poindexter said it seems there is a consensus to make contact and request a meeting.** Robert Conner said he believes it would be good for our legislative members to find out the intentions of NC. Then we would meet anywhere they want to meet. Delegate Byron said that right now we do not have any firm structure in NC to contact. Therefore we need to compel those holding this up in NC and get something determined and established. **Harrel Johnson replied that what he understood was in addition to Lucy Allen and A. B. Whitley, there was to be a 3rd legislative representative. However in the redistricting that figure was removed from the Roanoke Basin. VA could interact with the other two mentioned. I agree with you that VA has every reason to be frustrated with the process and that it is time to come to the table. As to a meeting date it probably should proceed the legislative session which begins in NC this coming February. I encourage this group to go forward. You have a very valid argument as you have been sitting over here waiting on these folks and its time for NC to do something.** Delegate Byron suggested that a letter be sent to NC pushing for a meeting of the Bi-State Commission. **Robert Conner indicated that the letter would be more effective coming from the VA legislative members.** Harrel Johnson said the legislation is in place it just has not been implemented. **Senator Ruff suggested that Greg draft a letter from the VRRBAC legislative members to the Governor and Secretary of the Environment and Natural Resources requesting a meeting of the Bi-State Commission. He further said that the Chairman of the House Appropriations Committee in NC has an interest in a development in the basin and has made a two way transfer proposal that water be taken from the basin and the wastewater returned to supply the needs of the community. This could be part of the reason for the delay.** Robert Conner said someone in VA must contact the NC powers that be and say this is what we plan to do and do you agree to join us in this. My point is that the VA originators need to contact their NC counterparts and say VA has been meeting for 3 years now, where is NC in the process, and are you still interested in being a part of this Commission. **Senator Ruff stated that really this was a ground up initiative with the RRBA and not one conceived by the legislature. Legislators from both States were there in Danville but he did not know who was still in that position in NC.** Tom Cain spoke up and said that he had made some of the private contacts associated with that meeting and he would be glad to talk to them again. Chairman Poindexter said he heard a consensus to draft a letter. The second part is for us to continue to do our job, so is the Committee VRRBAC in agreement with the rest of the "Strawman". **Robert Conner replied that the document was sound and represented our work well. He said that we may want to recommend funding for DEQ to continue to staff the Committee.** Evelyn asked what the legislative members preferred us to do. **Senator Ruff stated that when we first started with this the idea was that we needed more communication between the two States and also within each State. It is important that each community's needs, assets, problems, etc are understood and represented. Then all this information could be meshed together and prevent stepping on one another's toes. I do not know if we have done a good enough job of providing this knowledge back to the localities. This is very important so that each community understands the impact of various proposals on the other communities. Maybe the next step is to provide a quarterly release to the newspapers about the work of the Committee and the problems within the basin.** Mike McEvoy suggested that we add a statement supporting more funding agriculture BMPs. **Dr. Cutler asked if this would include conservation easements as well as practices on the land.** Mike replied I think we are talking about any activities that reduce the amount of pollution. It is in these agriculture areas that impact can really be made. It is so much more expensive in the urban areas. **Robert Conner made a motion that we submit the "Strawman" be sent to our representatives, members of the Bi-State Commission, and the Localities and ask for feedback. If NC agrees to a meeting then this**

would provide them knowledge of things we have been discussing. This was seconded by John Lindsey and passed unanimously.

Sub-committee Reports:

Agriculture and Forestry

- Haywood Hamlet provided a report on the Agriculture Stewardship Act Program. He hoped VRRBAC could arrange for a future meeting someone from the Virginia Department of Agriculture and Consumer Services to speak to the Committee about the program.
- He would like some direction on what to accomplish with forestry on the subcommittee. It was mentioned that the VDOF had a new Forestry Plan they were working on and had solicited some input. It was suggested that we get someone to speak to us about that. Evelyn Janney said there was a Forester in Floyd County who could probably speak to VRRBAC.

Municipal Interests and Permit Holders (MIPH)

John Lindsey said we are refining the data we have and the appropriateness of the questionnaire. The objective is to determine the long term needs of the basin and how the known supplies will meet those needs.

Rivers:

Watt Foster was not present. Read did not have anything to report about the basin.

Water:

- Mike McEvoy said the Water Supply Planning Regulations would become effective the first week in November. It is a requirement for planning departments to really look at private subdivisions and whether or not you have resources to supply them.
- The State has scrapped its old wastewater reuse rule has asked for public comment on a new rule which includes a proposal for irrigation with treated wastewater. The proposal has good support for this idea.
- He has also been attending the Lake Nutrient Standard TAC meetings. A draft regulation for nutrients in lakes is at public notice. Violations of standards would trigger a TMDL.

Lake Interests:

Robert Conner said that many of the Lake Committee items had been brought out earlier today. Work continues on hydrilla control. **Heywood Hamlet said he really appreciated the boat tour of the Hydrilla at Lake Gaston at the last meeting. The gentleman from Poplar Creek Marina was very nice to take us out.** Robert stated that if it keeps spreading the lake would not be a lake as we know it. The people would not be there. **Curry Martin asked if the treatment was working. Bob says that it is effective where applied but a lake that big it will pop up in another location.** Virginia provides little funding. NC funds it with about \$200,000, Va. Beach provides \$210,000, and the surrounding localities supply about \$40,000. Chairman Poindexter indicated that to date there was no proof of any hydrilla in SML. A survey was completed recently. However, if it is found we have a contingency fund to fight it. **Haywood said if he understood correctly it was spread easily from boat props or fishing rods.** Robert said even wildlife can spread it.

Other Business:

Smith Farm:

- Tom Cain spoke to the group about this farm which was willed to Va. Western Community College for educational purposes. The will is tight and specific on this requirement. Tom says there is a huge need for watershed education, to teach people how to live in a watershed. He hopes to use this property, which is in a key area around Smith Mt. Lake, it to teach people how to live in a watershed. A program would be developed in conjunction with VWCC and Franklin County. 65 % of the land out there is still forested and about 20 % is still farmed. A lot of the programs he has dealt with are looking at the other 15 %. We need to look at the entire watershed, beginning at the edges. That is the genius of this group as that is what you are doing. Most people don't realize that they live in a watershed. So it is important to teach them that actions they take can impact the watershed and their neighbors. For instance teach them about septic tanks. Here is a piece of property of significant size and owned by VWCC. It could be used to reach a part of the population who may not get further academic training. If you begin to teach people how to conserve and handle water, this could help prevent the destruction of the hydrology of the watershed. Teach them about the impacts of building, creating impervious surfaces, land disturbing farming practices, and the associated runoff in the watershed. There are ways to work with forestry and agriculture to make sure we do not disrupt the hydrology of the watershed. So I believe what we want to do is to develop the concepts of how to teach that to the general public and how to support a program of this nature. Especially with the tourist market around this lake it would be beneficial to create program linkages with the college and the 4-H center. This would help educate the public that they live in watersheds and that there are safe and sound ways to manage their activities to limit the impact of man's life on the environment and each other. For example flooding, drought, and wildfire scenarios could be minimized. Also, to maybe teach things like organic farming and about the nutritional quality of food. We can make a demonstration facility that is not someone's private farm and disrupt their family life. These are unformulated ideas at this time but I think the idea is right. The general public needs to be aware of the watershed concept and how to protect the neighbors downstream.
- Chairman Poindexter said these are interesting ideas and asked him to keep us informed. **Mrs. Janney said that it is amazing that even though we live in agricultural areas, there are children out there who think chocolate milk comes from a brown cow. I think this is a good idea.** Chairman Poindexter agreed and said it was a natural tie-in here with the children and other visitors that come to the 4-H center. The farm is just over the hill here. He suggested that a coalition be formed with other groups like the Farm Bureau.

Future Meetings:

A discussion ensued as to the availability of the legislators if we come to Richmond during session. Senator Ruff indicated that was hard to guarantee because there are so many impromptu meetings. It was decided that the next meeting will be held in Floyd County, on January 18, 2005 at 10 a.m., arranged by Evelyn Janney. There was a suggestion that at a future meeting that a presentation on the upper forks of the Roanoke River be made.

Adjournment: